

**ARIZONA COLORADO RIVER SHORTAGE  
SHARING WORKSHOP**  
**September 21, 2005**

**Date:** September 23, 2005

**Subject:** Report from Workshop Number 12, September 23, 2005

**Summary:** The agenda for the September 21, 2005 shortage stakeholder workshop included: 1) a review of the modeling data assignments from the August 26<sup>th</sup> meeting, 2) shortage criteria recommendation from the stakeholder workgroup, and 3) shortage sharing strategy preferred approach and schedule of meeting dates. The agenda was amended to include a presentation from Tim Henley regarding the seven Basin States technical workgroup modeling update.

## 1. Seven Basin States Technical Workgroup

Tim Henley gave a status report on the seven Basin States technical workgroup analysis of alternate reservoir operations for Lakes Powell and Mead. Common assumptions for all scenarios include: January 1, 2005 starting reservoir elevation, simulation beginning 2005 through 2025, Mead operated to meet downstream demand except during flood control releases, ISG through 2016 then 70R. The depletion schedules include Lower Basin 7.5 for normal, surplus schedule for surplus years; Upper Basin 4.45 maf in 2005 ramping up to 5.43 maf in 2060, Mexico deliveries 1.5 maf for normal and 1.7 maf for flood control years, future inflow derived from historical record, bypass flows assumed to be 109 kaf/yr, Powell operations independent from Upper Basin reservoir operating rules. The simulation ran the worst-case hydrology sequence, 1953 – 1973 repeated in 2005 – 2025.

The technical workgroup assumed that 602(a) storage was set to elevation 3651 or 17.39 maf; these values were used because it would be extremely complicated to alter the 602(a) algorithm for each of the variable Powell releases that were analyzed.

The seven Basin States workgroup has analyzed several alternate operating scenarios including some conjunctive management scenarios and tiered alternatives including 200/400/600 kaf – beginning Mead elevation 1100 ft, 400/500/600 kaf – beginning elevation 1075 ft, and 400/700 kaf – beginning elevation 1075 ft.

## 2. Modeling Results/Shortage Criteria Recommendation

Don Gross presented the comparative analysis of cumulative shortage volumes by user group for the five alternatives that were carried forward for further consideration. All model runs were started at Mead elevation 1075. Cumulative shortage volumes through 2050 for all alternatives were very similar; the difference between the highest cumulative volume (80P1050/500 kaf) and the lowest (200/400/600 kaf) was approximately 850,000 af. Bar graphs displaying the allocation of cumulative shortage by user group were presented for each alternative for simulated shortage

conditions beginning in 2010, 2016, 2025 and 2030. Tables representing the shortage allocation by user group, for simulated shortage conditions ranging from 200 kaf to 800 kaf for the four above referenced years were also presented.

The workgroup tentatively recommended adoption of the tiered 400/500/600 kaf shortage criteria. This recommendation could change depending upon the final recommendation regarding shortage sharing between CAP and Colorado River fourth priority water users, or if reservoir operating conditions change as the result of the seven Basin States discussion.

### 3. Shortage Sharing

Some workgroup participants have been meeting separately to develop alternate proposals for shortage sharing between the CAP and Colorado River fourth priority water users. ADWR will provide analysis of these proposals for the shortage-sharing meeting scheduled at 10:00 a.m., Friday, October 7<sup>th</sup> at ADWR. A second meeting has tentatively been scheduled for 1:00 p.m., Friday, October 14<sup>th</sup>.